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Developing Electronic Questionnaires at Statistics Canada

Issues and Challenges for Questionnaire Design

QUEST April 2011
Granada, Spain

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Overview

- New E-questionnaire project
- Objectives
- Roles & responsibilities
- Developing guidelines for E-questionnaires
- Some issues and challenges



A new approach

- Part of an overall corporate initiative
- Reassessment of electronic data collection at Statistics Canada
- Incorporate E-questionnaires in mainstream operations
- Project approved & initiated in 2010



A new approach (continued)

- Surveys designed to make E-questionnaire:
 - principal mode of collection
 - first step in sequential multi-mode environment
- 130 business & household surveys to be deployed over next 5 years



Business questionnaires - profile

- Data collection traditionally conducted using paper questionnaires
 - Mail-out mail-back ... (facsimile, spreadsheet...)
 - CATI follow-up
- No specific design standards for paper instruments
- **New model:** Surveys specified according to generic functionalities



Central elements

- Electronic Questionnaire Generation System (EQGS)
 - Cornerstone of the technical platform
 - Custom built by Statistics Canada
 - Generates E-questionnaires from input specifications
- Input processes
 - Consultation with subject matter areas
 - E-questionnaire guidelines
- Overall deployment schedule



Overview of deployment process

Consultation & specification



EQGS functionalities



Build & test E-questionnaire



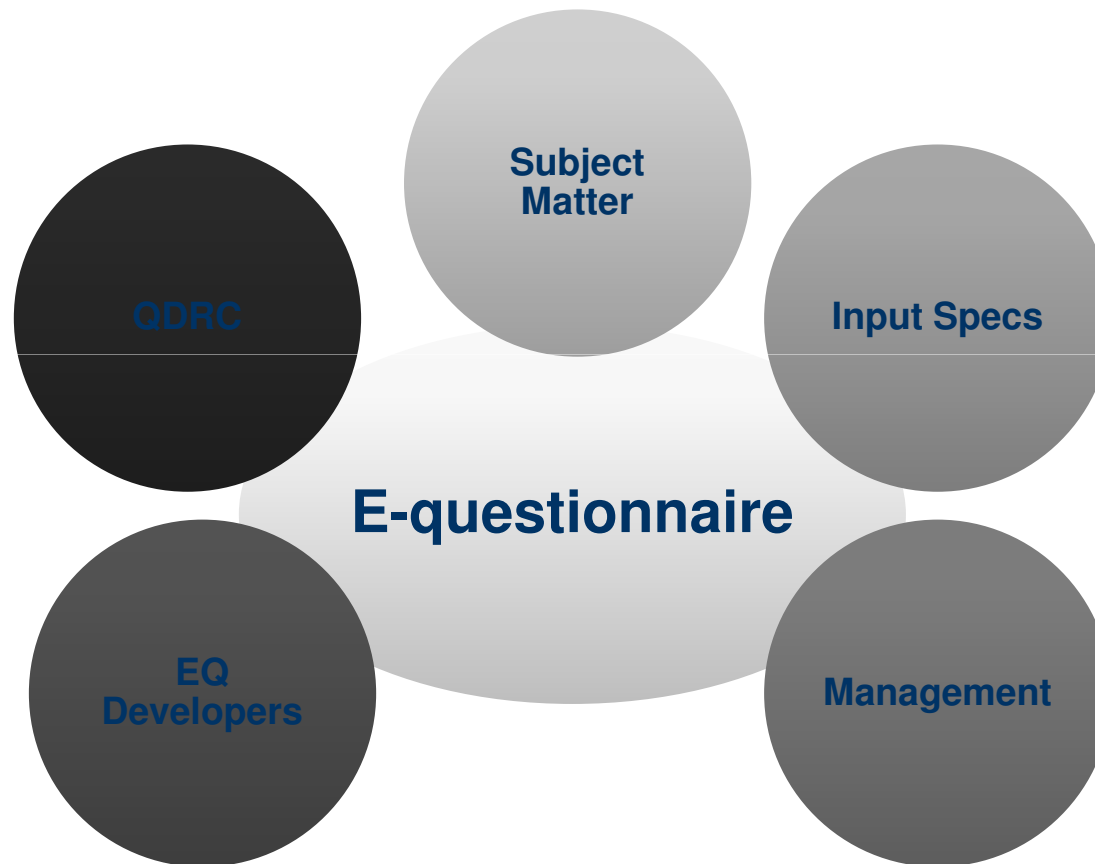
Data Collection



Post-mortem



Collection partners





E-Questionnaire Guidelines

- *EQ Standards Committee* established in 2010
- Proposed guidelines formulated based on:
 - existing practices and testing
 - external documentation and literature
- **Principal focus:** design features
(e.g., navigation, usability, accessibility, etc.)
- **Out-of scope:** "Traditional" components of questionnaire design



E-questionnaire Guidelines (continued)

- First document drafted- April 2011
 - currently under internal review

- Living document
 - To evolve in controlled & deliberate fashion



Guidelines: in-scope elements

- Common Look and Feel (CLF)
- Consistent use of colour (B/W)
- Fonts and styles
- Consistency of tool bars
- Navigation keys & buttons (functionality & placement)
- Movement and skip functions
- Survey window interface
- Answer space placement & selection
- Question placement
- Instructions
- Character limitations
- Message displays
- Generic contact information and introduction page
- Session time outs
- Browsing & printing
- Functionalities for negative values, decimals and thousands (\$)



Guidelines: out of scope ... currently

- Survey-specific content such as:
 - Question content, structure, wording
 - Instructions
 - Transitions
 - E-mail correspondence
 - Help content



Project status

- Seven (7) business surveys began e-collection in March 2011
 - based on new model

- Four business and two agricultural surveys scheduled for usability testing
 - May-July 2011



Some issues and challenges

- Ambitious deployment schedule
- 'Cultural shift' for subject matter areas
 - Specification process
 - Managing expectations
 - Impact of EQ guidelines
- Communication
- Questionnaire content development
 - Content review & earlier involvement
 - Establishing & implementing guidelines for traditional elements of QD
 - Presentation across modes
 - Paper → EQ ?



Some issues and challenges

- Technical changes
 - Functionalities
 - Survey-specific idiosyncrasies
 - Survey deployment on evolving platforms (migrating)
- Planning and implementing usability testing
 - More players and steps involved
 - Ability to end-user test in E-questionnaire environment
 - Adequate time for reporting results and implementing change



Questionnaire Design Resource Centre

- An integral role in future question design guidelines
- Become involved earlier with EQ content and specifications
- Communicate & incorporate findings into 'EQ guideline process'
- Develop & foster in-house testing strategies
- Keep apprised of ongoing research and developments by our international colleagues



Good visual design will not fix a poorly written question, and a well-written question can be misinterpreted or ignored due to bad visual design

(Morrison, Dillman, Christian, JOS, 2010)



For more information

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